



Impact of anthropogenic and natural environmental changes on Echinococcus transmission in Ningxia Hui Autonomous Region, the People's Republic of China

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Abstract:

Echinococcus transmission is known to be affected by various environmental factors, which may be modified by human influence or natural events including global warming. Considerable population growth in the last fifty years in Ningxia Hui Autonomous Region (NHAR), the People's Republic of China (PRC), has led to dramatic increases in deforestation and modified agricultural practices. In turn, this has resulted in many changes in the habitats for the definitive and intermediate hosts of both *Echinococcus granulosus* and *E. multilocularis*, which have increased the risks for transmission of both parasites, affecting echinococcosis prevalence and human disease. Ecological environmental changes due to anthropogenic activities and natural events drive Echinococcus transmission and NHAR provides a notable example illustrating how human activity can impact on a parasitic infection of major public health significance. It is very important to continually monitor these environmental (including climatic) factors that drive the distribution of *Echinococcus* spp. and their impact on transmission to humans because such information is necessary to formulate reliable future public health policy for echinococcosis control programs and to prevent disease spread.

Source: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3419675>

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Ecosystem Changes, Precipitation, Temperature

Temperature: Fluctuations

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

resource focuses on specific location

Climate Change and Human Health Literature Portal

Non-United States

Non-United States: Asia

Asian Region/Country: China

Health Impact: ☒

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Zoonotic Disease

Zoonotic Disease: Other Zoonotic Disease

Zoonotic Disease (other): Echinococcus

Resource Type: ☒

format or standard characteristic of resource

Review

Timescale: ☒

time period studied

Time Scale Unspecified